

For questions #1 -5, use the picture below to answer the questions

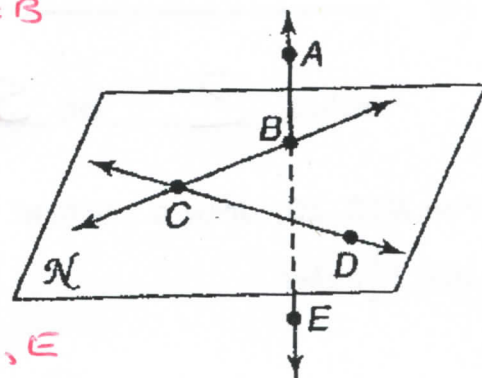
1) Give another name for \overleftrightarrow{AB} \overleftrightarrow{AE} , \overleftrightarrow{EA} , \overleftrightarrow{BA} , \overleftrightarrow{BE} , or \overleftrightarrow{EB}

2) Name a plane that contains point B PLANE BCD

3) Name three collinear points A, B, + E

4) Name three non-collinear points ANY 3 NOT ON SAME LINE B, D, E

5) Name a pair of opposite rays that have an endpoint of point B \overrightarrow{BA} \overrightarrow{BE}



For questions #6-15, use the picture below to answer the questions

6) TRUE or FALSE - points B, E, H and G are coplanar.

7) Name a point coplanar with D, C and E F or J

9) Name three collinear points F, J, E or H, I, E

10) \overline{BH} and \overline{GH} intersect at H

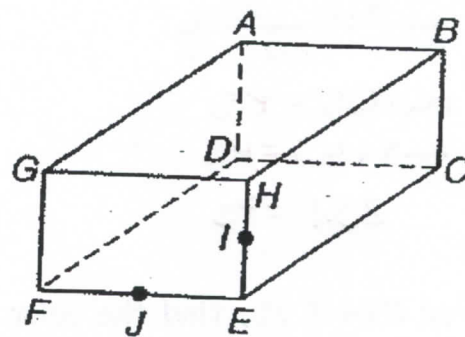
11) \overline{AB} and \overline{CB} intersect at B

12) Plane ABD and plane EFD intersect at \overleftrightarrow{DE}

13) Plane BCH and plane GHE intersect at \overleftrightarrow{HE}

14) Plane ADF and \overline{DG} intersect at Coplanar, all points in \overline{DG}

15) Plane BHE and \overline{CD} intersect at C



For #16-17, use a ruler to find the measurement of each segment in inches and centimeters.

16) 

inches 2 cm 5.2

17) 

inches $3\frac{1}{8}$ cm 8.1

For #18-20, draw a segment with the given measurements.

18) $2\frac{1}{4}$ inches

19) $3\frac{3}{5}$ cm

20) 4.7 cm

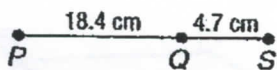


For #21-23, find the measure of each segment using the given information. No rulers!

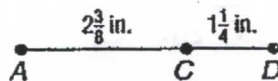
21) $\overline{PS} = \underline{23.1 \text{ cm}}$

22) $\overline{AD} = \underline{3\frac{5}{8} \text{ in}}$

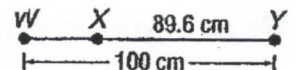
23) $\overline{WX} = \underline{10.4 \text{ cm}}$



$$\begin{aligned} PQ + QS &= PS \\ 18.4 + 4.7 &= PS \\ 23.1 &= PS \end{aligned}$$



$$\begin{aligned} AC + CD &= AD \\ 2\frac{3}{8} + 1\frac{1}{4} &= AD \\ 2\frac{3}{8} + 1\frac{2}{4} &= AD \\ 3\frac{5}{8} &= AD \end{aligned}$$



$$\begin{aligned} WX + XY &= WY \\ WX + 89.6 &= 100 \\ -89.6 &\quad -89.6 \\ \hline WX &= 10.4 \end{aligned}$$

For #24 & 25, find the value of x and the measure of \overline{KL} if point K is between J and L.



24) $\overline{JK} = 6x$, $\overline{KL} = 6x$ and $\overline{JL} = 27$

$$\begin{aligned} \overline{JK} + \overline{KL} &= \overline{JL} \\ 6x + 6x &= 27 \\ 12x &= 27 \\ \frac{12x}{12} &\quad \frac{12}{12} \end{aligned}$$

$$x = 2.25$$

$$\begin{aligned} \overline{KL} &= 6x \\ &= 6(2.25) \end{aligned}$$

$$\overline{KL} = 13.5$$



25) $\overline{JK} = 2x$, $\overline{KL} = x + 2$ and $\overline{JL} = 5x - 10$

$$\begin{aligned} \overline{JK} + \overline{KL} &= \overline{JL} \\ 2x + x + 2 &= 5x - 10 \\ 3x + 2 &= 5x - 10 \\ -3x &\quad -3x \end{aligned}$$

$$\begin{aligned} 2 &= 2x - 10 \\ +10 &\quad +10 \end{aligned}$$

$$\frac{12}{2} = \frac{2x}{2}$$

$$6 = x$$

$$\begin{aligned} \overline{KL} &= x + 2 \\ &= 6 + 2 \end{aligned}$$

$$\overline{KL} = 8$$